THE GENESEE FARMER.

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PUBLISHED BY LUTHER TUCKER.

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☞ THE MONTHLY GENESEE FARMER is made up of selections from this paper, and published on the first of each month, forming, with Title-page and Index, an annual volume of 200 pages, at the low price of FIFTY CENTS a year, *payable always in advance.*

GENESEE FARMER.

SATURDAY, JUNE 10, 1837.

Our Country.

The immense quantities of flour, which, since the rivers and canals have been freed from their icy barriers, have found their way to the cities of the sea board, principally New York and New Orleans, must serve to convince us of the vast resources of the west, as well as read a useful lesson to those individuals, who, speculating on the wants of the people, have, during the winter, refused a fair compensation for bread, and with a miser like grasp held their flour until the time of remunerating sales is past. Never have the advantages of easy intercourse between different sections of the same country been more clearly illustrated than by the events of the last few months. Foreign trade has, it is true, thrown a million or two of bushels of grain into the country, but notwithstanding this partial supply, had not these facilities of intercourse been created, the population on the sea board would at the present moment have been in a state little short of starvation. Now the surplus provisions of the great west is readily, and with mutual benefit, exchanged for the manufactures and the merchandise of the east.

So extensive is our country, so diversified is its soil and climate, that a general failure of the crops through the whole extent is scarcely to be apprehended. Were the United States, like Europe, divided into separate governments, with diverse and contradictory interests, with but imperfect means of communication, and those fettered with the most vexatious restrictions, a failure in one section might be attended here, as we know they have been there with the most disastrous results. But our interests are the same; our laws, our restrictions, our regulations are the same; one part of our country cannot long flourish at the expense of another; and where the wealth and happiness of one, is the wealth and happiness of all, there must be a constant tendency to the equalization of benefits. Where the intercourse, as in these states, is easy and free; where transportation on Nature's highways, or the constructions of art, is without restriction or limit; it is beyond the power of one section permanently to oppress another, or scarcely possible to imagine a situation in which industry and economy will not secure an abundance of the necessaries of life. The crops may partially fail in one section, but experience shows that the surplus from the surrounding districts will immediately fill the void; and such is our highly favored lot, as to soil and climate, that we have nothing to fear except from our folly or imprudence. Ample supplies will always exist in the country—to properly apportion them is our own business.

A Good Beginning.

The State of Michigan, the youngest of the sisterhood, yet whose advantages are such as to promise a growth so rapid as soon to place her on an equality with many of those that are some half a century older, has with a forethought and spirit that does her honor, formed a State Agricultural Society; and we cannot doubt that this promising beginning will be followed up with vigor and success. We hail as a token for good, every manifestation of an increased attention to the cause of agriculture; for we are convinced that in its extension and improvement lies the basis of our country's prosperity, and the present deplorable state of things most clearly demonstrates that it has been too much neglected, if not actually undervalued and despised, by those who ought to have understood its importance, and the necessity of protecting and advancing the interests of the farmer.

The Michigan State Society was organized on the 24th of April, when an able report was made by a committee previously appointed, and a Constitution adopted by the Society. We should be glad to copy largely from the report, but our limits will admit only of an extract or two. The report says with great truth—"There is a too prevalent disposition too regard the business of the farmer as a mere matter of manual labor, and of established routine. But in truth there are few of the occupations of man, upon which so great a variety of knowledge can be made beneficially to act." * * * "If it be the effect of these associations we are endeavoring to reccommend [as it undoubtedly is] to correct this disposition so far as it may be excessive and injurious, to inspire a taste for knowedge, and to promote the habits to which its pursuit is conducive, their advantages cannot be too highly estimated."

Like that of our own State, the Michigan Ag. So. is to hold its meetings during the session of the Legislature; but unlike our State Society, or the cause of agriculture among us, we hope the government of that State will sufficiently appreciate the worth of the cause in which that Society is laboring, to liberally extend its aid in promotion of its objects. The money expended in the cause of agriculture, or the efforts made to advance it, may not produce as visible an effect, as if executed in some more showy but less substantial way; still in no way can the foundations of prosperity be so broadly and deeply laid as by a judicious mingling of intelligence and labor. Education and agriculture here go hand in hand; useful knowledge teaches the farmer to understand his rights and his duties; agriculture gives him the means, and labor the physical constitution and strength to practice and defend them. Michigan is here clearly in the right, and with our best wishes for the success of the Society, we can only say to them, "Go ahead."

Reasons for a Rotation of Crops.

Every farmer who is well informed, or who is an accurate observer of the means necesary to success in tilling the soil, is aware that changing crops is one of the most essential steps in obtaining this result. Unless in extraordinary cases, he never thinks of getting wheat, or corn, or other grains, two successive years from the same ground; experience has taught him that this course is not consistent with good farming; yet he may not be aware of the many explanations that have been given of the causes that render such rotation necessary.

When it had been ascertained that any tap rooted or pivoting plant, such as the turnep, beet, or carrot, would grow where the same year, or the year before, clover or grain had grown, it was by some writers on agriculture supposed to result from the radicles of this class of plants having power to make their way through the already impoverished superficial layers of the soil, and striking deeper, to where the power of sustenance was yet unimpaired. This in part may be true, but to this hypothesis it may still be objected, that were the elements of nutrition and growth contained in the earth, and these all that plants require for their support and the perfection of their seeds, then it would be sufficient to manure the wheat or cornfield of the preceding year, to make it capable of a second years crop. This however as a general result is contradicted by experience, and therefore cannot be a satisfactory explanation of the cause why a rotation is necessary.

The celebrated Pictel of Geneva, supposed that the circumstance of roots succeeding after grain, was probably owing to different plants requiring and drawing from the earth not the same, but different elements, the supply of any of which being limited, the earth is amerced of some new and sustaining principle by every succeeding crop This explanation is defective in assuming that plants have a power of selecting their nutritive matter, an assumption not only hypothetical, but wholly contradicted by the facts; for plants are observed to take up indifferently all substances soluble in water.

The speculation of Decandolle has found numerous and able supporters; still we think it wholly unreconcilable with numerous facts. This philosopher supposes that the excretions from plants during their growth, may act as poisons to the earth, and, after a certain time, so injure it, as to prevent the further growth of plants that may once and perhaps recently flourished there. Such excretions he supposes to be emanations from the root, the remains of those juices which the earth and air conjointly supply, and upon which in reality the plant subsists. But against the very fact mentioned by Decandolle in confirmation of his opinion, that opium strewed upon the ground kills plants, and renders the soil henceforth unproductive, we may adduce the much more apposite fact that trees grow and flourish for entire centuries in the midst of excretions from their own roots. Of this our primeval forests furnish the most ample evidence; as do the prairies of the illimitable west, or the meadows or pastures that for ages immemorial in England have been devoted to grass, prove that plants of this kind do not suffer from these imaginary secretions.

The celebrated naturalist Mirbel, has lately given the following explanations of the phenomena that render rotation of crops advisable. They are simple, and in the main satisfactory, amounting in substance to the same that have been given in a former volume of the 'Farmer.'

"Plants require other elements for their support, besides the elements of assimilation, and cannot thrive without them. For instance there is silex in the cane, and there is lime in certain plants, (say wheat,) whose organization could not be completed without it. The quantity of any such foreign ingredient in a plant is generally small; still the necessity for it may be presumed as absolute. Plants cannot be constituted unless all the materials they require be furnished to them; and indeed the same observations will apply to animals; deprive a hen of lime, her eggs will have no shell; deprive the earth of its salts, such as form potash, soda, or in combination with minerals lime, gypsum, &c., and you destroy its productive power. The smallest quantity of gypsum will have a remarkable effect on clover; and the effects of the other combinations are scarcely less visible on other varieties of plants. But the formation of these salts, or materials, exciting and sustaining the growth of plants, when spontaneous, is slow, and the result of regular chemical changes which have been at work for centuries; and when the natural and limited supply is exhausted as it soon must be, if the successive crops of the same kind are forced upon the soil, then the plants will look yellow and shabby, each year renders it more worthless, until finally not enough will grow to repay cultivation. Let the crop perish where it grew, the earth will re-assume the minerals and salts extracted from it during such growth, and the same plants will flourish indefinitely."

The course of the farmer then in the cultivation of the soil would seem to be plainly indicated. The cause of exhaustion once ascertained, and a suitable remedy discovered, it only remains to avoid the one, and apply the other, to ensure perpetual fertility to our soils. By carefully examining the nature of plants, the soil they best flourish in, the kinds of food they require, the manures that act the most on their irritability and stimulate their growth the most sensibly, we shall arrive at correct conclusions respecting many processes that are now involved in mystery, and exceedingly simplify the manner, as well as increase the profits of agriculture.

Washing Sheep.

In order to have wool command a good price in the market, or be in the best state for manufacture in the family of the farmer, it is indispensable that it be well washed;

and we have reason to believe that this process is but very imperfectly performed in proportion to its importance. In the first place, sheep are usually washed too early in the season. The weather should be warm, and the water should have time to be freed from its winter chill, before the washing of sheep is undertaken. Sheep now rarely lose their wool in the spring; a reason that once was the most successfully urged for early washing, and no loss from this cause rises from waiting. The health of the sheep, and the comfort of the washer, both demand that regard should be had to the temperature of the weather and the water, before the process is undertaken. Sufficient attention is not paid to tagging the sheep, or freeing them from hardened and accumulated dirt, before washing. Neglect here will always cause a serious loss, by injuring the quality as well as lessening the quantity fit for market.

There is great deficiency in another respect which should be corrected. Sheep are frequently washed, or rather wet, as if the process was one intended for a frolic, not for use. Only get them into the water, and in the opinion of many, the grand object is accomplished. Now sheep should be washed clean; if they are not, they may as well be let alone, and the time and trouble of wetting them saved. Soap should be used when necessary, and the whole business should be conducted with care and attention. No more should be penned at once than can be washed well and thoroughly within a reasonable time; to shut them up and keep them eight or ten hours without food is a needless piece of cruelty

It is the practice of many to drive their sheep some two or three miles to a lake or river for washing, but the practice is a bad one and generally entirely needless. By driving them so far they frequently tire out, and always get more or less dust and dirt fastened to their wet wool. There are but few farms, certainly but few neighborhoods, in which clear running brooks cannot be found, and with these places for washing are easily made. A tub four or five feet in depth and as many in diameter, such as is frequently used by the farmer for holding rain water, a trough or spout large enough to convey a suitable quantity of water to the tub, and a pen for yarding the sheep are all that is required; and these can in most cases be provided in a few hours. At such a tub two men can wash easily, without being seriously wet themselves, and with an entire command of the sheep at all times. Some prefer vats of a suitable depth; but the fact that vats are as expensive as tubs; that they can be used for nothing else while tubs when not wanted here are always useful elsewhere; would seem to render tubs preferable. This is, however, of little consequence compared with the benefits of washing sheep at home; a system which when once adopted by the farmer will be rarely exchanged for the laborious one of driving abroad. This method of washing requires but little water; just enough to flow off freely, washing away the dirt and other impurities, either over a depressed part of the margin of the tub, or through a suitable sized opening near the bottom.

We are also convinced that a majority of our farmers shear their sheep too soon after washing. If sheep are washed as they should be to render the wool clean, much of the natural yolk or oil of the wool, a substance that contributes much to its smoothness and ease of working, is taken away. If sheared too soon after washing, the wool is destitute of this principle, and is apt to be harsh or tender, an evil that the greasing given by the manufacturer, but imperfectly remedies. Sheep should be allowed to run several days after their wool is dry, always being careful to confine them to clean pastures, and the benefit of the delay will be felt not only in superior softness and quality of the fleece, but in the greater weight and consequent profit of sale.

GEOLOGY, &c.—By a different arrangement of the State Geologists, the region west of Cayuga Lake is assigned to Messrs. JAMES HALL and GEORGE W. BOYD. They have arrived in Rochester, and commenced their explorations though the Genesee Valley, with the view of thoroughly testing the accuracy of the opinions entertained by many respecting the existence of coal formations in the hills of this state near the Pennsylvania frontier. We learn from Mr. Hall, that he will make Rochester his central point while engaged in his inquiries; and that it will give him much pleasure to hear from gentlemen throughout the District, personally, (or if by letter, post-paid,) respecting such facts within their knowledge as might advance the great objects which led the state to authorize the Geological Survey. A series of QUESTIONS will be published in the papers, to which the attention of the people generally is respectfully invited. Any communications or specimens will be received by Lyman B. Langworthy, City Superintendant, in the absence of Messrs Hall and Boyd on their exploring tours.

☞ Gentlemen resident along the Genesee River will doubtless endeavor to facilitate the researches of the Geologists, who are now commencing on this route.

Geological Survey of the State.

A geological survey of the State of New-York was commenced during the last year, in compliance with an act of its Legislature. Most of the season was consumed in making a general reconnoissance, and the geologists are now prepared to commence the detailed examinations of their respective districts.

In consequence of the great area of the territory, it is impossible for them to examine it as much in detail, in the time specified, as is desirable in order to develope fully the mineral resources of the State. With a view to facilitate the progress of the survey the following queries are proposed to the people of the State, with a hope that every one who is interested, either in having the mineral wealth of his estate known, or in advancing geology and its kindred sciences, will contribute such aid as may be in his power. The local knowledge of individuals may be of great importance in expediting the survey.

We would suggest to proprietors of estates, that they forward to Albany specimens of the minerials, rocks, marls, peats, petrifactions and soils, to illustrate the nature of the materials of their lands. The mineral wealth, as well as the agricultural value of an estate should be known before a proper estimate of its worth can be formed. Our land owners are more immediately interested in the geological survey than any other class of the community, and they will appreciate the importance of having the mineral products of their estates represented in the State Cabinet.

Individuals and associations are requested to lend their aid in advancing their own and the public interests. Boxes may be sent directed thus:

To SYLVANUS P. JERMAIN,
ALBANY.

(G. M.)

1st, 2d, 3d, or 4th Geolog. District.

The 1st geological district contains the counties of Suffolk, Queens, Kings, Richmond, New-York, Weschester, Rockland, Putnam, Dutchess, Orange, Sullivan, Delaware, Ulster, Greene, Columbia, Rensselaer, Albany, Schoharrie, Schenectada, Saratoga and Washington.

The 2d contains Warren, Essex, Clinton, Franklin, Hamilton and St. Lawrence counties.

The 3d contains Montgomery, Herkimer, Oneida, Lewis, Jefferson, Oswego, Madison, Onondaga, Cayuga, Otsego, Chenango, Broome, Tioga, Cortland, Tompkins and Seneca counties.

The 4th contains Wayne, Ontario, Monroe, Orleans, Genesee, Livingston, Niagara, Erie, Chautauque, Cataraugus, Allegany, Steuben and Yates counties.

The designation of 1st, 2d, 3d or 4th Geological District, should be marked on the box, according as the county from which the box is sent, is in one or the other of these districts.

Letters should accompany the boxes, or be sent by mail, describing them. It is hoped that the specimens will be transmitted free of expense to the State. A concise abstract of general directions for selecting geological specimens and observing geological phenomena, will be found at the end.

Letters from the various parts of the State, containing local information upon any subjects embraced in the queries, may be addressed to

W. W. MATHER, *Geologist of the 1st District, Albany.*
EBENEZER EMMONS, do *2d* do do
LARDNER VANUXEM, do *3d* do do
JAMES HALL, do *4th* do do

ROCKS.

1. Have *ledges* of rock been observed in your vicinity?
2. Are the ledges on the sides, or on the summits of hills; on the shore, or in vallies?
3. Is the direction of the ledges parallel to that of the hills, or what is the direction of each by compass?
4. Are the rocks divided into regular layers?
5. Towards what point of the compass do these layers pitch with the greatest declivity?
6. Are there veins of other rocks traversing those beofre mentioned?
7. In what direction do these veins cut through the rock, and are they perpendicular or inclined?
8. Have any ores been found, either diffused through the mass of rock, or in separate beds or veins?
9. Have any useful, or curious, or rare minerals been found in the rocks or veins?
10. What names are commonly used to designate the rocks, ores, minerals, &c. referred to?
11. Have they been applied to any useful purposes?
12. Where ledges of rocks have been recently uncovered by excavations, are the surfaces smooth, as if by the action of running water, or with pot-holes, such as are seen at many water falls?
13. Do any of these surfaces shew grooves and scratches, as if hard masses had been dragged over them?
14. Do the rocks recently uncovered shew traces of the shells of barnacles, or other marine remains attached to them in sheltered situations, and much above the level of the sea?
15. Are shells or petrifactions of any kind, or the remains of plants, found in any of the rocks, and in what kinds of rocks do they occur?
16. Are slate, limestone, sandstone, granite, gneiss, &c. found in your vicinity?
17. Where rocks of different kinds come in contact, is there any change in their characters near their junction?
18. Do the rocks shew distinct lines of demarkation, or do they gradually blend into each other?
19. At the junction of trapean and granitic rocks with others, are there any evidences of former high temperature, such as sublimation of sulphur into cavities, cokeing of coal, apparent fusion of the rock, a vesicular texture, or other appearances which are familiar to the mind, where the bodies have been heated?
20. Where masses of granitic or trapean rocks occur *in situ*, can any connection be traced between these and dykes or veins of similar materials which traverse the adjacent rocks?

SANDS.

1. Are there beds of fine white sand, which contain no black, or red, or yellow grains?
2. Has it ever been used for making glass, or for other purposes?
3. Are there beds of red or black sand washed upon the beach?
4. Are these sands abundant enough for purposes of commerce?
5. Have they ever been used as iron ores, or as a substitute for emery, or for blotting sand?
6. Is the general surface of the country sand, clay or loam?
7. Do these substances form alternating regular layers?
8. Does the sand on the surface of the country drift by the wind?
9. Have any farms been thus materially injured?
10. Have buildings, trees, hedges, fences, or walls been covered from this cause; or marshes or ponds made dry land? Do the sands progress in any particular direction, and at what rate per annum?
11. Is the sand in any locality hardened into a sandstone?
12. Is sand washed along shore by currents, and deposited in new situations?

13. Are any Islands, sand-bars, spits, shoals, or beaches, known to have been thus formed?
14. Have islands been connected with each other, or with the main land, by bars, spits, or beaches?
15. Have islands or coasts been washed away entirely, or in part, by the action of the sea?
16. Where cliffs have been undermined, and have tumbled down, what kinds of earth, or rock, were exposed?
17. Were they arranged in layers?
18. Were bones, shells, bits of wood, or lignite imbedded in them?

CLAYS.

1. Are any beds of clay known in the vicinity?
2. Are the beds extensive or of small magnitude?
3. At what depth do they lie below the surface?
4. What is the thickness of the bed or beds?
5. What materials were observed in digging down to the n?
6. Are the clays in thin layers which easily separate?
7. Do the beds of clay alternate with beds of sand and gravel?
8. Are the layers of the beds of clay, gravel, or sand, inclined, or are they level or undulating?
9. What is the color of the clay?
10. Is it mixed with sand, or is it free of grit?
11. When mixed with water, does it form a tough and plastic mass, or does it crumble to a pap?
12. When heated red hot, does it become red, brown, or white?
13. To what useful purposes has it been applied?
14. What quantities are annually exported, and for what purposes?
15. Has it been tried as a manure on sandy soils?
16. Do balls, or flat rounded masses of a hard earthly mineral, occur in the clay.
17. Are they arranged in layers parallel to the layers of clay?
18. Are they of the same materials as the clay?

WATER, SPRINGS, &c.

1. At what depth is water obtained?
2. What strata are passed through before reaching it?
3. Does clay, loam or rock, occur at the level of the springs?
4. Is the water "hard" or "soft," as these terms are usually employed when speaking of water?
5. Did the water percolate gradually into the well when first dug, or did it come in a strong stream?
6. Have shells, bones, pieces of blackened or common wood, beds of marl, or of clay, been observed in digging wells or cellars, or by the caving down of cliffs and banks on the shore, or by the side of streams?
7. Have mineral springs been discovered?
8. What is their taste? sulphurous, inky, pungent, or saline?
9. Is there any sensible odor to the water? What is it like?
10. Is the water sparkling like bottled beer; and does air bubble up from the fountain?
11. Is there a reddish or yellowish deposit where the waters flow off, on in the adjacent meadows, or ponds, or is there a similar oily scum on the water?
12. Do sticks, mosses, leaves, &c. become incrusted with a hard stony coat, or is there a gray or yellowish rock forming near the spring, by a deposit from its water?
13. Has the water been used in the cure of any diseases?
14. Is the spring copious?
15. Do large springs burst from the earth?
16. What is the temperature of springs?

SALT MARSHES.

1. Have the salt marshes in your neighborhood remained unchanged during the observation of the old inhabitants?
2. If they have risen in level, to what cause do you attribute it? to animal or vegetable decomposition, or to both, to drift sand, mineral springs, &c., wash of the sea, wash of the adjacent hills, or all these?
3. If they have sunk below their former level, did it happen gradually, or suddenly?
4. If the latter, was it at the time of any extraordinary natural phenomenon?
5. Of what materials are your meadows composed?
6. Are they covered with moss and cranberries?
7. Can they be made to tremble by walking or jumping on them?
8. Have they changed in the amount of surface that can be mowed, within the period of a life?
9. Are there any evidences or traditions that they were once larger or smaller than they are at present?

SUBMARINE FORESTS.

1. Have trees, stumps, or logs been seen standing in the water on any part of the coast of Long Island, or of the adjacent coasts or islands?
2. Where have they been seen, and in what depth of water?
3. Is the time of the subsidence of this land known?
4. To what cause do you attribute it?
5. Is there any tradition concerning it?
6. Is the wood in its natural state, or is it more like charcoal in its appearance?

SUBTERRANEAN FORESTS.

1. In digging wells, or other excavations, or by the caving down of banks and cliffs of earth, have any traces of trees, wood, bark, leaves, nuts or seeds been discovered buried deep in the earth, or at a greater depth than we would expect to find them from the effect of present causes?
2. Were these remains in their natural state, or were they converted to stone. or to a black substance like charcoal?
8. If the latter, has the substance been used as fuel?
4. At what depth does it lie? and in what earth? (sand or clay)?
5. What strata were observed above and below?
6. Do the trees stand erect?
7. Do they lie all in one direction?
8. Do you suppose drifting sands, washing by water, or other causes have buried them?
9. What is the situation of this lignite with regard to the sea, or to water courses, and its relative height or depth above or below them?
10. Have shells or bones been found in the layer containing the lignite, or in the adjacent strata?
11. What is the color of the adjacent clay, sand or gravel?
12. Have masses of a heavy yellow metallic stone (pyrites) been found in the adjacent clay? and has it been applied to use?

PEAT BOGS AND SHELL MARL.

1. Are there inland meadows or swamps in your vicinity that tremble when one walk over them?
2. Are they covered by moss, and cranberry vines?
3. To what depth can a pole be thrust down?
4. How many are there, and of what extent in your vicinity?
5. Does the peat, or black tremulous mud, rest on sand, gravel, rock, or a white clayey marl containing small shells?
6. Has the peat been used for fuel, or for burning lime or bricks?
7. Has the peat, or shell marl, been used as a manure?

BOG IRON ORE.

1. Are there ponds or marshes in the vicinity, in the bottom of which? is a soft spongy, yellowish brown stone, or gravel?
2. Does it originate from mineral springs, or from stagnant waters?
3. Has it been used as an iron ore?

MARSHES.

1. Have the marshes on the borders of lakes, on the banks of streams, or on the flat table lands, in your vicinity, changed materially within the remembrance of old inhabitants?
2. Have they become more wet, and risen so as to cover land before dry?
3. Have they sunk in level, and from what cause?
4. Have they become more dry, and from what cause?
5. Have they changed in the natural growth of he soil?

DRAINAGE OF LAKES.

1. Are there any evidences of the lakes in your vicinity having once occupied a higher level than they do at present?
2. Does this evidence consist in elevated beaches or the cutting down of their outlets, or both these combined?
3. Are there vallies which seem to have been once lakes, and what evidence is there on this point?
4. Are there regular stratified deposits of clay, sand, gravel, &c. in the valleys?
5. Are organized remains of plants or animals found in them?
6. In the gorges at the outlets of lakes, or along the courses of the streams which flow from them, are there marks to show the wearing action of wa-er much above its present level?
7. Are there deep defiles through the country flrough which the water flows or seem to have once howed?
8. What is the nature of the strata of those defiles, and generally of the country at any of the particular localities to which you have referred?

RIVERS.

1. Are the rivers and streams in your vicinity, deepening their channels, or raising their beds by the deposit of alluvial matter?
2. Do you know of instances of lateral streams bringing in such quantities of alluvial matter, and of so coarse a texture, that the larger stream is unable to sweep it away, and causes the formation of of lakes in the valleys above?
3. Are rivers or smaller streams lost by sinking in the ground?

RLOLED MASSES, PEBBLES, AND ERRATIC BLOCKS.

1. Are any large rounded or irregular masses of rock found in your neighborhood?
2. Do they occur mingled with gravel and pebbles, or are they isolated on the surface, or imbedded in the earth?
3. Do they crumble away by the effects of the weather?
4. Are they smooth, or nearly so, like pebbles?
5. Are there scratches on them in one or more directions?
6. Are there ridges on them in one direction only from the harder points of the stone, and parallel to the scratches?
7. Are these rounded masses of all one kind of rock?
8. What rock or rocks constitute the masses and pebbles?
9. Are they similar to ledges of roek known to you, either in the vicinity or elsewhere?
10. Are barnacles or other shells, or the remains of marine animals observed on them, where they are at a distance from the sea or buried in the earth?
11. Has ice been known to move masses of rock in ponds, streams, bays, or inlets?

ELEVATION OF LAND.

1. Are there beds of rock containing remains of animals or plants, whose proper habitat is the ocean?
2. Are the rocks horizontal or inclined?
3. Are they bent, contorted, or are they dislocated?
4. What is the direction of the line of bearing of the strata?
5. Is there any evidence that the rocky strata have been elevated at one, or at several epochs? If at one epoch, all the strata are conformable up to the time of its occurrence, unless in the rare case of elevation without derangement of the dip. If at several, the strata, formed subsequent to each of these epochs, are successively unconformable to those below, with the same exception as above.
6. Are the axes of elevation parallel, or do they intersect, and what are their directions?
7. The occurrence of anticlinal and synclinal lines, and their directions, should be particularly noted.

(*Remainder next week.*)

New England Wool Crop.

Wool has become the principal staple of New England, and its production is rapidly multiplying the number of rich farmers in all parts of its territory. There are supposed to be in Vermont 1,000,-911 sheep; in New Hamphire, 465,179; in Connecticut 300,000 and in Massachusetts, Maine, and Rhode Island enough to make up the round number of 6,775,090. The value of the annual wool crop is estimated at $112,195,12.—*Silk Culturist.*

Green Peas, Strawberries and Potatoes, of this season's growth, were for sale in the Baltimore market in considerable quantities. Peas 75 cents per bushel, and strawberries 25 cents per quart.

COMMUNICATIONS.

Improved Breeds of Swine.

Mr. Tucker,—Dear Sir—Annoyed as I continually am by the sight of the wretched brutes called "hogs," in vulgar parlance, (and no name can be better applied to the same *brute*, for they are really below the common term "animal,") which infest our streets, highways, and fields, wherever they can break into them, it gives me great pleasure to see the farmers so much awake to the subject of improving the breed of swine in our country.

Last week while loitering along the Dock in Buffalo, surveying the numerous magnificent steamboats which lay there with their crowds of passengers, emigrants, moveables, and a thousand other every day affairs of life, my attention was arrested by the sight of several cribs containing sundry "Berkshire" Pigs on their way to Louisville, Kentucky. They were purchased principally of our good friend Mr. Bement, at Three Hills Farm near Albany. A very superior yearling boar, the owner paid $80 for, and two young sow pigs he bought for $30. He also offered Mr. Bement $80 for a large breeding sow of the same blood. Such swine can hardly be purchased at too high a rate, as their introduction into this country is invaluable. But I must on no account omit to give my continued good opinion of the integrity and value of the China pigs, which I have for some years kept, and now have in full perfection. My further experience warrants all I have heretofore said in favor of them. They have been extensively scattered over the country, and all who have tried, speak well of them.

I have also introduced the Berkshire breed on to my farm from Mr. Bement's herd. I like them much. They are a large and heavier animal than the China, but not so compact, quiet, and easily to be kept as the latter. But a cross of the Berkshire upon the China, produces the finest pigs I have ever yet seen. We have several litters of them, and they are to my mind the perfection of the swine family, if such an unseemly animal can be in any way called *perfect*. For the information of the public, I will observe, that both of these breeds of pigs, either pure or mixed, are now kept at the farm of Mr. A. B. Allen, on the Niagara river, two miles below Black Rock, for sale, where the public can hereafter be accommodated.

Mr. A. is doing much to improve the stock in his neighborhood, having one of the best blood horses in the state. "Bellfounder," sired by the celebrated imported trotsing horse "Bellfounder," for a long time kept on Long Island, and whose superiority as a roadster was extensively known. This horse of Mr. A.'s is out of the fine thorough bred imported mare, "Lady Alport," of the best blood, combining that of the celebrated English "Mesenger" and "Eclipse," a full brother to this horse. "Bellport" stands also in the east part of the county, at Clarence, and at Darien in the west part of Genesee. Such horses cannot but do much towards improving the value of our breed of horses, and should meet with due encouragement.

In addition to these, Mr. A. has also some fine Devon and Short Horned cattle, and some fine young stock of the cross of these breeds. They are beautiful animals, uniting the good qualities of both, the snug, compact frame, and beautiful deep color of the one, with the stout size, and firmly expanded limbs of the other. His thorough bred bull "Leonidas," of the Short Horned breed, bred by Mr. Hitchcock of Vernon, from the fine herd of Mr. Rotch of Butternuts, is a noble animal. In fine, I am beginning, after so long a struggle to introduce good animals into this region, to have some little hopes of the country, more particularly as these wretched times of scarcity and speculation are teaching us all a lesson upon the old fashioned benefits of industry, improvement and economy.

After so much said upon the subject of domestic stock, I should not omit speaking of some beautiful animals of the Short Horn breed, which have arrived here on their way to Milwaukie, in the territory of Wisconsin. They consist of four fine animals, a bull, cow, and two heifers. They were all purchased of Mr. Hitchcock, and the two first were bred by Mr. Rotch at his farm in Otsego, and sold when young to Mr. H. They brought at their last sale $500 each, and were as well worth the money as any imported animals which I have seen, at their prices. It is very gratifying to see these fine cattle going to the far west, where they cannot fail to improve the vast herds which graze on the luxuriant prairies of that country, and on which the eastern states must ere long depend for their main supplies of beef.

I am getting into quite a herd of Short Horns myself, having about thirty full bred animals, old and young. My confidence in their great superiority over the common cattle of the country increases with my experience in keeping them. The cows are almost universally good milkers, and they are as hardy and easily kept as any others. My young bull "Oseola," is a noble fellow. By the way, that same chief, Oseola, is a far better man than many of the petty potentates who have so outraged him and his nation, and I like to keep his name in remembrance.

The season with us has been very backward. The plum and cherry trees are now just beginning to bloom. At Lewiston, where I was on the 31st of May, the plum and cherry trees were in full blow, and the apple trees were just opening. Yesterday, June 1st, large cakes of ice floating down the Niagara river from Lake Erie, and great masses of it have been, since the opening of navigation, floating near the foot of the Lake. Present prospects, however, are favorable for a fruitful year, and one productive in all agricultual crops. Such a season was never more wanted. The scarcity of all sorts of provisions never was greater. Potatoes and oats, are worth from seven shillings to a dollar per bushel, and many farmers and others cannot obtain a sufficient quantity for seed. But with due industry, economy, and perseverance, we shall get through it, and may this severe lesson be long remembered. Most truly yours, Ulmus.

Black Rock, June 2, 1837.

P. S. I have for the last year had some of the beautiful Bakwell sheep of Mr. Dunn of Albany; some high bred and choice merinos from a fine imported Spanish flock; and some of Mr. Rotch's valuable Southdown on my farm. I am crossing them in various ways, and hope to make something from them. It is an *experiment* that I am trying with sheep on these levels and rich lands, and so far I have succeeded as well as I could expect. I incline to the opinion that for level lands we must provide stout made and strong sheep, better fitted, perhaps, for mutton than fineness of fleece.

On the destruction of Silkgrass or Milkweed.

Mr. Tucker—I have observed on many fields of a deep rich soil, especially meadows, a heavy growth of what are commonly called milkweeds, and think if the owners knew how easily they might be destroyed they would not suffer their best lands to be infested with them. This has induced me to communicate an experiment. When I was a child, my father gave me a stick and bade me go whip the milkweeds. His instructions were that I should not cut off the main stalks, but whip the leaves and mutilate them in such a manner as to produce the greatest flow of the juice of the weed. I do not know when this was done, but recollect the weeds had become large, yet had not attained their full growth. Four or five blows were generally sufficient for each weed. The whipping was twice repeated after that at intervals of about 2 or 3 weeks. The next summer, but few of the weeds were to be seen, and such as made their appearance were dealt with in the same manner as had been done the year before, which summary punishment was sufficient to drive them effectually from a very fertile piece of meadow so that they were no longer troublesome.

Amber, May 24, 1837. L. D.

The Lowell Courier says that as a substitute for small change, in these hard money currency times, a marketman from a neighboring town, foreseeing the state of things, besides his usual load of marketables, filled up a cask with eggs to make change with. They served him well—for besides answering his purpose as change, he made sale of a good round edition of them.

From the Virginia Farmer's Register.

Culture of Silk.—The Brussa Mulberry.

[We are indebted to Mr. Rhind, (who negociated the treaty of the United States with Turkey, and was long a resident of the latter country,) for the following extracts, which formed part of a correspondence between Mr. Rhind and Judge Spencer of New York. Mr. Rhind has taken so much interest in this subject and has had such good opportunities to form correct opinions, that his authority deserves to be held in great respect. His favorable opinion of the Brussa mulberry, therefore, offers a sufficient inducement to rear that kind, and to give it a fair trial of comparison with others. But we should at present distrust the *seeds*, for propagating the same kind, unless it is avowed that they have been tried, and found not to produce other varieties, as is the case with the *morus multicaulis*.—Ed. Far. Reg.

Extract of a Letter from Mr. Rhind to Judge Spencer.

"During the reign of the emperor Justinian, when the two monks were sent by him to *Seres* to bring from thence the eggs of the silkworm, it is natural to suppose that they would also adopt the precaution to bring with them the seeds of the tree which afforded the *pabulum* or nourishment for the insects; and it is highly probable that while the hollow cane of one monk carried the eggs of the insect, that of the other carried the seeds of the tree,* if such was the case, the first mulberry plantations must have been in the vicinity of Constantinople. The country called *Seres*, by the ancients, is generally admitted by modern writers, to be *Little Bucharia*, and *that* country is situated in a latitude similar to Brussa, in Asia Minor, not far from Constantinople. This species of the mulberry flourishes best in high and *even poor lands;* and *Brussa*, being situated on the rise of Mount Olympus, has a climate and soil closely resembling that of *Little Bucharia*, and the superior quality of the *Brussa* silk, over all others, in the markets of Europe, would seem to evince a congeniality of soil and climate. Mount Olympus is perpetually covered with snow, and the basis of the mountain (near which Brussa is situated,) being in my opinion, more similar to our climate than any other in the latitude, I was induced to select the seed of the *Brussa mulberry tree*, in preference to those of any other place, as one more likely to endure the rigors of our severe winters, and not be so subject to the effect of frost, as trees brought from more southern latitudes, or warmer climes.

"The leaves of the *morus alba* of Brussa are said to contain a much great quantity of saccharine matter, than any other of the white species, and moreover, the leaf is much larger than those of Italy and Spain; it is also a hardy tree, susceptible of being raised in climates, where the frosts are severe. I therefore believe, that the *morus alba* of *Turkey*, is decidedly the best for our climate, and next to it, those of Italy and Spain; although the latter were, I presume, originally obtained from the east, as we find the culture progressing from Asia, through Greece, Sicily, the Belearic islands, Spain, and Italy, and eventually to the south of France. It is probable that the species has degenerated more or less in those countries, since neither of them produce an article of commerce, equal to that of Brussa, notwithstanding the cultivation and manipulation of silk, in Turkey, is far inferior to that of Italy or France; I consequently attribute the superiority in the quality of the former, to the greater quantity, or richer nature, of the nutritive substance contained in the leaf.

"The *morus multicaulis*, although possessing a larger leaf than those of Brussa, does not, I apprehend, contain an equal quantity of nutritive matter. Count Dandolo says, that the leaves of the broad leafed white mulberry, contain but little saccharine matter; and I hence infer that the *multicaulis*, being of similar species, contains less saccharine matter than the *hardy alba* of colder climates. In southern latitudes, similar to those of China, where it is said to be cultivated to most advantage, and where frosts are unknown, the *multicaulis*, may be most suitable; but for our climate, the *morus alba*

*Some authors affirm, that the monks first brought the seed of the tree *only*, and that the emperor sent them back to Seres, for the eggs of the insect.

is decidedly the best and safest. Future experiments will doubtless elicit the comparative excellence of the different species. But since we know that the *Brussa Tree* is of superior quality, and I have proved that it will endure the severity of our winters, (for the last three were unusually severe, and although young as they were, not a single tree was lost,) hence they may now be considered as acclimated.

"That silk can be produced with infinitely less trouble than is generally supposed, I am fully persuaded; and I have, in the course of my travels, visited most of the silk-growing countries, and gave considerable attention to the subject.

"The culture of silk is peculiarly deserving the encouragement of patriotic and benevolent men, inasmuch as it will afford (in its different manipulations,) a living to the most helpless of our race; *aged* and *decrepit* persons, and *children*, can all be employed in some part of the process, and to a portion of the female sex, who may have been reared in luxury and indulgence, but by change of fortune have become reduced, yet are willing to labor, rather than depend on the cold hand of charity, or the benevolence of friends, this culture will afford a certain and independent living, without exposing them to the scoffs and scorns of a selfish world.

"In the city of *Brussa*, containing about 100,000 inhabitants, their principal occupation is the production of silk. When the *crop-season* commences, the leaves are brought to the city by the cultivators, in baskets, and sold in the market in quantities to suit the purchasers, in the same manner as fruits and vegetables. Almost every family, when the season begins, clear out the rooms of their dwellings, (reserving one or two apartments to live in) and fill the rest *on the floors*, with the worm. The women and children chiefly attend to feeding them, and when the worms from the cocoons (generally in about six weeks) *they* (the women and children) reel the silk, which is then ready for market, and thus in little more than six weeks, they gain sufficient to support their families, (in their simple style of living,) until the next season."

Extract of a Letter from Judge Spencer to Mr. Rhind.

"The trees which I received from you [Brussa mulberry, of three years old] indicate great hardihood, and I should think, not only from their not having suffered at the extreme points, and also, from Mr. Bradish's account of the trees, that they will endure our climate perfectly well; almost every tree has put forth leaves, and they are considerably larger and thicker than the white mulberry leaf. The Brussa leaf is nearly, if not quite equal to the morus multicaulis."

At the annual fair of the American Institute, at New York, in October last, specimens of the leaves of the *Brussa** tree, of different years growth, were exhibited, and excited universal approbation, and the Institute awarded a silver medal for the introduction of this invaluable tree, observing in the report of the committee, "that *these* with every new and useful plant, calculated to withstand the rigors of our climate, are worthy of attention, and those introducing them into our country, deserve to be placed on *the catalouge of our country's benefactors.*"

[*From the Farmer's Cabinet.*]

Sugar Beets.

The following letter from an intelligent and practical farmer, addressed to Benj. M. Hollinshead, Esq., of this city, (Philadelphia,) we most respectfully commend to the attention of our readers.

"In answer to thy inquiries as to the value of the beet root crop, I may state the following facts as the result of my own experience, and from which I come to the conclusion that, for the purpose to which I have applied them, there is no crop better adapted. The first of beets I raised was in 1835, when I planted about the sixth part of an acre in the middle of the sixth month, (June,) and from which I gathered 75 bushels; those I planted in rows about 3 feet apart, and about one foot between each plant; from this experiment I found, that to raise 450 bushels of the beet-root on an acre of ground, required much less labor than a crop of common potatoes. Neither do I consider this an average estimate of what might be produced, for the following reasons: 1st. They should be planted earlier in the season, that in case any of the seed should fail to come up, (as some of mine did,) the vacancies might be filled by transplanting from places where they would be too thick; and in sowing the seed, enough should be put in the ground for that purpose. 2. They might be planted much nearer together, say the rows two feet apart, and about eight inches between each plant in the rows; there would be then sufficient room to give them all the necessary culture. My object in raising this crop was to make an experiment in the way of obtaining sugar, at the suggestion of an individual who had that object in contemplation for several years; but from our limited knowledge of the process necessary to the accomplishment of that end, were not able to succeed further than in obtaining tolerably good molasses. I discovered however that but little was lost in consequence of the failure, because the pumice (that is, the roots after being ground and pressed) proved to be very good food for either cattle or sheep. By feeding on this, my cows yielded an additional quantity of milk. If for sheep, there was nothing perhaps much better, in consequence of the root being reduced to such very small pieces. The last year, 1836, I again raised another crop, but under the same disadvantages as the year previous—not getting my seed in the ground sufficiently early to admit transplanting, and have all the benefits of the season, which was rather an unfavorable one for this as well as most other crops, in consequence of so much cold weather. I had, however, a large quantity of beets, which I have fed away to cattle to good advantage, making use of the tops, in the early part of the fall, as food for cattle. I have fed my cows chiefly with them, and find they give more milk than before, and of a good quality.

I am, respectfully, thy friend,

JOHN JACKSON."

Darby, Del. co., 1st Mo. 1837.

The Great Error of American Agriculture Exposed, and Hints for Improvement Suggested.

BY THOMAS MOORE.

(*Continued.*)

This state of the soil, is too compact to admit of the free extension of the roots, even when moist; but, when hardened by droughts, every particle of nutriment not in contact with some of the roots, is effectually *locked up* from the *suffering plants.*—So that it often, nay almost always happens, on lands worked in this way, unless very rich indeed, that crops of wheat that looked promising in the fall, and early in the spring, begin to decline towards harvest; and people are complaining of the unfavorable appearance of their wheat: when harvest arrives, the straw is almost too short to cut, and the heads about half the proper length, and those not well filled, yielding six or seven bushels to the acre, where twelve or fifteen might have been reasonably expected, from the quality of the soil; these appearances and products agree with my constant observation for many years past, especially on early sowed corn ground, damages by fly, rust, &c. excepted.

If *manures* are applied to *shallow worked* soils, their good effects in general, will be of short duration, as most kinds must soon inevitably travel the road, the virgin soil has, before them.

I shall next enumerate some of the good effects to be expected, and which are constantly experienced by a *contrary* practice, viz: *deep ploughing*, when judiciously pursued; and then endeavour to prove the futility of the arguments adduced in favor of shallow ploughing.

In the cultivation of plants, three things are particularly necessary: First, that sufficient *pasture* is prepared for their roots; secondly, that the soil abounds with proper *aliment*, and thirdly, that *moisture* be duly administered, in neither *too great* nor *too small* quantities. That *deep ploughing* is calculated to promote these ends, I believe will not be hard to prove, particularly the first and third.

The quantity of earth operated on, being great, it very seldom, if ever happens, that any fall of rain is so great, as completely to *saturate* it; and until that effect takes place, or nearly so, very little change is to be expected in the disposition of its parts; and therefore when the redundant moisture evaporates it leaves the soil as it found it, except a small crust on the surface; the succeeding ploughings, instead of being applied to repair the injury the soil has sustained by great falls of rain, go to the further pulverizing and opening it suitably to receive the capillary vessels of the plants. Thus the pasture becomes not only *more extensive*, but far *better* adapted to promote the growth of plants.

With respect to *aliment*, naturalists differ widely in their judgment respecting its nature and composition; my opinion is, that the food of plants has not yet been fully ascertained by any. This however, we all know, that manures of all kinds, contribute in some way or other to the growth of plants; whatever may be their food, I will not pretend to say, teat it is communicated to the soil by the mode of cultivation under consideration; but this I will say, that it is far better calculated than the contrary practice (shallow ploughing) to retain the quantum originally found therein, or afterwards applied to it; and further if dews are nutritive, the superior openness of the texture in this mode, qualifies it to derive every advantage to be expected from that source.

But, perhaps the most valuable of all the effects resulting from *deep ploughing* is, that it in a great measure preserves an equal quantity of moisture in the soil; for as we seldom have a rain so great as to produce an unhealthy stagnation of water about the roots of plants set in a soil 7 or 8 inches deep; so on the contrary, we scarcely ever have a drought of so long continuance as to extract all the moisture to that depth; for it is to be remembered, that after a few inches nearest the surface, moisture is extracted, by slow degrees: thus for instance, if it requires one hot day to dry the first inch, probably it will require three, for the second, six, or more, for the third, and so on; perhaps nearly in geometrical progression.

Thus it appears from the foregoing observations, that by this mode of practice the great loss sustained by *washing*, an evil so much to be dreaded in this country, is avoided; that whatever manures are applied, are safely deposited, and will act with full effect; that the growing plants are abundantly supplied, during the whole of their growth, both summer and winter crops, with an open soil for a free extension of their roots, and also with a regular supply of moisture; so that their growth is at no time impeded by any small irregularity of season; the depth of soil being to them, with respect to wet and dry, what the ocean is to small islands, with respect to heat and cold; the means of a tolerably regulur temperature.

I can readily anticipate the remarks of our sticklers for old practices, on what has been advanced. This reasoning (says they) well applies to rich deep soils; but in poor shallow soils, "let him beware of the *yellow clay*, the *dead earth*, lest the value of his land proves to be the price of his too adventurous experiments." But let me ask them, have they never seen the effects of earths taken out of cellars and wells, when applied to poor land? Have they never observed the luxuriant growth of grass and weeds, at the edge of a bank, taken frow a millrace, or large ditch, and frequently on the very top, when flat enough to retain moisture? for my own part, I have long been in the habit of observing these things, and do not recollect that I ever saw any earth taken from a considerable depth below the surface, which was capable of being pulverized by frost or tillage, without evident advantage, even when clay has been applied to clay, and sand to sand. Seeing this is the fact, is there any good reason for supposing, that as we ascended toward the surface, such a difference will be found in the properties of the earth, that this will render the same land sterile, that the other will enrich? I confess I see none; I cannot even see, why we may not with propriety suppose, that the first six inches of earth next below the usual ploughing, should be possessed of all the fertilizing qualities, that the same kind of earth would be, if found six feet below.

It would seem then, that by this mode of cultivation (*deep ploughing*) on exhausted lands, the quantity of soil would not only be increased, but actually enriched. On lands, covered with two or

*In the publication of the Institute, the word *Russia* has been erroneously substituted for *Brussa*—*vide* the publications of the Institute for November and December, 1836.

three inches of rich mould, it will probably have a contrary effect in some degree, yet even in this case, the advantages resulting from an increase of quantity, will be found abundantly to overbalance the the small abatement in quality.

Their prejudices, in all probability, have proceeded from injudicious experiments; very few planters break up ground in the fall; in the spring their teams are often weak, and were they disposed to plough a spot deeper than usual, would very likly choose to do it when wet, on account of its being easier performed; soon after which the crop is to be planted or sowed, which proves the worse for the experiment, and the planter is disgusted with the practice: he informs his neighbors of the ill success of his experiments; and perhaps, a whole neighborhood is thereby afresh confirmed in their former belief that the good old way is best—to plough as deep as they find black soil, and no deeper.

Ploughing land that contains a considerable portion of clay in a state *too wet* to break, as the furrow leaves the plough, is, thereby, rendered more *compact;* and when hardened by the sun, becomes entirely unfitted for the production of vegetables; and is scarcely to be reduced by any succeeding tillage during the same summer; indeed, I believe, nothing short of a *winter's frost* will effectually *pulverize* it. The best devised system of practice, may be rendered entirely abortive, by being put into the hands of unskilful practitioners to execute.

Lands that are to be ploughed much deeper than usual, ought to be broken up in the fall; and would be the better to be ridged, that more surface might be exposed to the frost: If omitted till spring, it ought to be done as soon as it becomes dry enough to break freely before the plough: No crop should be put in that season, that requires to be seeded before it can have several ploughings and harrowings at proper intervals; otherwise, the expectation of the cultivator will probably be blasted.

If, notwithstanding what has been advanced, I should be called upon for proofs—should be told that the evils complained of on one hand, are in a great measure, ideal; and that the advantages proposed on the other, are theoretical, and remain to be confirmed by practice—with respect to the first it would, perhaps, only be necessary to say, what further proofs need we, to convince us that the practice of agriculture, particularly in the southern states, is miserably defective, than the deserted old fields that so frequently present their disgusting surfaces from Susquehanna to Georgia? Some years ago I was of opinion, that this speedy reduction of soil, was altogether occasioned by the nature of the crops cultivated thereon; but, on attending more accurately to the subject, I am of a different opinion, and believe, as I have already said—it is more from the *manner of cultivation* than from the *exhausting properties* of the crops; of this, one thing has tended to covince me; I have observed, that when an industrious person from another state or country, where the cultivation is generally *deeper*, has settled on these exhausted lands, that they frequently improve for some years; although the *same crops*, or those equally as *exhausting* are cultivated; and, instances I have known, of some of these old fields becoming very productive without manure.

Almost every summer furnishes abundant proofs of the great disadvantage of the practice of shallow ploughing, to both summer and winter crops; if we were but disposed to open our eyes and look for them. A very curious one lately happened on my own farm.

A field was sowed with wheat by a tenant, the ploughing from three to four inches; a deep hollow extended across part of the field, in a direction nearly east and west; the side exposed to the north tolerably good, the south exposure very rich; as might be expected, the wheat on the strongest soil made the most promising appearance in the fall, and also for some time in the spring; in the early part of which clover seed was sown on the whole, which came up well; a drought came on late in the spring; the south exposure *drying first*, the wheat soon showed the effects of it; and, the drought continuing, a considerable part entirely *perished;* the north exposure also suffered, but being more shielded from the action of the hot sun, was not so effectually dried. At harvest it was much the best wheat, notwithstanding the superior richness of the soil on the other side. A still greater difference appeared in the young clover; on the south hill side it was almost entirely killed, on the other very little injured.

I have had some experience of the beneficial effects to be derived from *deep ploughing*—but the obstructions in most of my fields (particularly large stones just below the surface) have prevented my adopting the practice so fully as I could wish; yet the success that has always attended my experiments, in conjunction with my observations on the practice of others, has been conclusive evidence to my mind.

In the year 1795, I took possession of my present farm, and had a field ploughed for wheat, which had been thought for several years before, too poor to cultivate, either in wheat or Indian corn: I saw rye growing on the best part of it, two years before, just before harvest, that I think would not yield two bushels to the acre. It was ploughed early in the spring, about eight inches deep and repeated with harrowings, at proper intervals, several times during the summer; it was sown about the last of the ninth month. The soil being weak, the growth in the fall was slow, as also in the spring, yet regular, the color always good, and no appearance of suffering, either from *drought* or *wet;* at harvest, the straw was not tall, nor thick on the ground, but the heads large and well filled; the product, between sixteen and seventeen bushels per acre, except a part of the field, sown with a kind of wheat I was not before acquainted with, which was too thin, in consequence of a short allowance of seed. I observed the state of the soil, from time to time, until *harvest*, and found, that even *then*, it was open and in good tilth, except a crust of two or three inches, next the surface.

In the spring of 1796, with a large plough and four horses, I broke up part of a field; I measured the ploughing frequently, and found it in many places eleven inches deep, and nowhere less than seven; so that the average was at least nine. This piece contained about four acres, on a gentle declivity; the surface too much exhausted, to pay for cultivating any crop in the common way: this ploughing brought to the surface about five inches of earth, that had never before been exposed, which was principally clay at the upper edge of the piece, of a bright yellow which became gradually paler, further down, and of a bluish appearance near the lower side. After several stirrings, it was sown with buckwheat the same year; the crop tolerable; after the buckwheat came off, the ground was ploughed and sown in rye, in the eleventh month, very little of which came up, owing, as I suppose, either to its being too late put in the ground, or the seed not good. It remained without further tillage until last year (1800) when it was again sown in buckwheat, which grew so large, as generally to fall. Before it was ploughed in the spring, I took several of my friends to see the difference in the appearace of this piece and the ground adjoining, that had lain the same length of time out of tillage; it was discernable to a furrow; the *deep-ploughed* piece appeared of a fine open texture, and dark color thick set with white clover; the adjoining ground compact and hard, of a *pale* ash color, bearing scarcely a blade of any other kind of grass, than that common to old fields, known by the name of poverty-grass: In short, one had the appearance of an exhausted old field, and the other of land lately manured. Those who expressed a sentiment on the subject, were of opinion, that those who did not know what occasioned the difference, the *deep ploughed* piece would sell for double the price of the other.

Part of another field, from having a very retentive clay near the suface, was of that kind called cold or sour land; and was thought unfit to produce any crop; either water or ice generally appearing on the surface, in an open time in winter. This was so thick set with white flint-gravel and stones, that the first ploughing could not be deep; but having cultivated several crops on it, taken off the largest of the stones, and consequently been able to get a little deeper at each succeeding ploughing, the nature of the ground seems altered, so that now there is seldom either water or ice to be seen on its surface, more than is common to other places: It is now in red clover, very little of which has been injured by the late open winter. This piece has been manured; it is therefore, unfair to ascribe the quantity of the crops, which have been good, to deep ploughing only; though I am of opinion, that on such land, manures are not of much consequence without it.

I might have before observed, that one of the objections that will probably be made to *deep ploughing*, is the greater strength of team than will be requisite to perform it, and consequently an additional expense. This I believe, on consideration, will also be found to be without foundation. True it is that the first ploughing requires more strength of team; but then it is equally as true, that if the plough is a good one for the purpose, almost double the quantity will be performed in a given time. The four acres above mentioned, was ploughed by four horses in less than two days; the furrows averaged seventeen inches in width. And as ground ploughed in this way will not acquire the same degree of firmness for many years afterwards, although it should remain untilled, it will be found, that three horses to a plough will be sufficient for after ploughings, even for a grass-lay; and that two such teams will perform as much in a day as six horses in three ploughs of the common kind, and of the common description of ploughing. Here then is a plough-man saved. In addition to this, it is to be remembered, that for reasons before given, land cultivated in this way, will be preserved in good tilth with much fewer ploughings than the other mode.

Thus, let the subject be considered on whatever ground we choose to take it up, either with respect to the preservation of the soil, the quantity of produce, or the quantum of labor bestowed, the advantage is greatly on the side of the method proposed.

But let me again repeat it, that those advantages depend in great measure on the manner of performing it. It must never be forgotten, that ploughing when the soil is very dry, is of no other consequence than to destroy weeds; but when over wet, in stiff soils, the mischief is incalculable; it is at least irreparable for that season.

If any should be still disposed to condemn the foregoing observations untried—to say, that if those extraordinary advantages will result from *deep ploughing* that are ascribed to it, they certainly would have been long ago discovered, and the practice universally adopted; that a great proportion of the inhabitants of the United States, being engaged in the business of ploughing nearly one half of their time, it is not reasonable to suppose those things could have escaped their observation.

As a full answer to such, let me call their attention to some of the absurd practices that the best of our cultivators are just emerging from; and that probably they themselves remain in; let them view their own practice in these things, and then say, whether they feel that consciousness of perfection, that will justify them in condemning proposed improvements without trial.

Let them reflect a moment on the propensity that almost every planter feels for clearing a piece of land every year, which is very commonly continued until there is little or no wood left, either for fuel or fences; and very often it happens that in the latter stages of this erronious conduct, more than half their cleared land is so far exhausted, as not to be worth cultivating; more acres of which, than they annually clear, it is amply within their power to reclaim and render as fertile as ever it was, and that with half the expense; yet strange to tell, every acre is neglected, while the clearing business is pursued with avidity, until at length, the fatal blow is struck and necessity compels them to part with their murdered estates for a trifle, and seek refuge in the Western country. Witness, some of the lower counties of Maryland and a great part of Virginia.

Let them reflect on the immense labor that has been bestowed in the Southern states, in the business of raising great hills about Indian corn. It is now acknowledged, with good reason, by many of the best planters, that it is altogether useless in promoting the growth of corn; but say they, it is absolutely necessary to raise a small hill, to prevent the corn from falling by storms of wind and rain. Let us try the wisdom of this improved mode. Every one who has paid attention to the growth of corn, must have observed, that before, or about the time it arrives at the state of danger, it is sure to send out a circle of strong roots just at or a little above the surface; these are the supports of nature; and so well are they adapted to the purpose, that we seldom see a stalk torn up by the roots, except where the earth is previously washed from about them.—If let alone, there is no other danger to be apprehended than from the breaking of the stalks, which in-

deed, sometimes happens, and which hilling does not prevent. If it is bent down by wind and rain, when the wind ceases and the blades are released from their burden of moisture, it will of coursa rise. But the officious planter must do something to assist nature. He accordingly raises a hill; how does it affect the plant? Let him observe it soon after, and he will discover he has mistaken his aim; that nature, feeling herself thwarted, is endeavoring to repair the injury, by retaining a part or the *nutritive juices* provided for the support of shoots above, for the purpose of sending out a *new set of braces* above the *new raised hill.* This takes time, and frequently before the new roots have taken hold in the earth, a gust of wind and rain comes on; the consequence of which is, that the hill soon becomes softened by the rain, and the wind at the same time pressing the stalk against it, it gives away and leaves an opening behind the stalk; this opening is instantly filled by the rain beating the earth into it, and the stalk secured as far as it has gone; another blast forces it still lower, and the same effect succeeds behind it; when the storm is over, we find the stalk fixed precisely at that point of depression at which the hardest blast of wind left it, after the hill became wet. This is the present *improved* mode of hilling corn.

Let them reflect on the present mode of *supporting* their *stock*, which is principally from the *cornhouse;* by neglecting the culture of *grasses*, the stock is maintained (if well maintained) at more than *double* the *expense* that it might be by a proper att ntion to grass; and the land at the same time reduced to *poverty*, that would otherwise be *enriched* by such attention.

Now my friends, view yourselves impartially in the mirror thus held up to you, and I believe you will cease to wonder, that you have not long since discovered the advantages of *deep ploughing.*

(*To be Continued.*)

Duration of Roots.

Roots with respect to duration are, *annual, biennial or perennial.*

Annual roots—are such as live but one year. They come from the seed in the spring, and die in autumn, including such as are raised from the seed every year: as peas, beans, cucumbers, &c.

Biennial roots—are such as live two years. They do not produce any flowers the first season, the next summer they blossom, the seeds mature, and the roots die. The roots of cabbages are often, after the first season, preserved in cellars during the winter. In the spring they are set out in gardens, and produce flowers; the petals of which, in time, fall off, and the germ grows into a pod of silique, which contains the seed. The root having performed this office, then dies, and no process can restore it to life; the flowering is thought to exhaust the vital energy or living principle. The onion, beet and carrot, are biennial plants.

Perennial roots—are those whose existence is prolonged a number of years to an indefinite period; as the asparagus, geranium, and rose; also trees and shrubs. Climate and cultivation effect the duration of the roots of vegetables. Many perennial plants become annual by transplanting them into cold climates; the garden nasturtium, originally a perennial shrub in South America, has become in our latitude an annual plant.

CARNATION. *Dianthus caryophyllus.* Here is beauty and fragrance. It is a superb plant, and is biennial and perennial. There are various kinds, distinguished by names like those of the auricula, and what was said of the seed of that plant applies to this. It is best propagated by *layers.* While it is in flower, it sends out several side shoots near the root. These are pinned down in August a little under the earth, leaving the extreme part erect. In a little time they take root, and the new plant must be severed from the old and transplanted. The old plant does not always stand another winter; therefore, its branches are thus used to continue the species. Carnations are rather tender as to frosts, and must be well covered, as far north as Massachusetts, to live through the winter. It is best to put them in large pots, to keep them in a green-house, or parlor, or in some place where they can have are and light, during the winter. They merit all this care that can be bestowed upon them.—*New Amer. Gard.*

There have been riots at Manchster, the result of the difficulties there; manufactures having no work on hand, the starving hand loom weavers assembled and pillaged the provision shops for food. Special constable were called in, and the millitary called out, but the rioters separated on promise of relief from the town authorities, which has been daily kept to a thousand starving artisans.

Macbeth was a murderer, not because the witches predcited, but because that perdiction aroused the thought. Beware then of signs and fortune tellers.

Buckwheat Wanted.

A HIGH price will be paid for good clean Buckwheat, i delivered soon at the Rochester Seed store.
june3f2w REYNOLDS & BATEHAM.

Berkshire and China Pigs for sale.

THE subscriber has a considerable number of the pure Berkshire and China Pigs on sale at his residence on the Niagara river, 2 miles below the *B*lack Rock mills. *He* has also crosses of the *B*erkshire and China, and the China with the long English breed which are equally quiet in their habits, and possess the same tendency to fattening as the former, and have much the advantage in size. The character of these breeds are so well known throughout the state that any description would be superfluous; they are the choicests breeds in England, and the only kind used, by their best farmers, and it is believed the same quantity of food will make from 25 to 75 per cent. more pork in these hogs than if fed to the ordinary breeds.

PRICES.

Pure China or cross of China with the long Eng. lish per pair at 4 weeks old,	$12 00
do. do. do. 6 weeks old,	15 00
Cross of China & Berkshire, perpair at 4 weeks old,	14 00
do do. do do 6 do	18 00
Pure Berkshire, do. 4 do.	15 00
do. do. 6 do.	20 00

Communications made through the post office, should be directed to Buffalo.
june3ftf A. B. ALLEN.

Greenhouse and Parlor Plants.

THE splendid collection of Ornamental Plants at the Rochester Greenhouse on Sophia street, are now in a fine healthy condition and ready for sale.

The assortment is very large and embraces many of the most rare and beautiful Flowering Plants, all of which are of easy cultivation and will thrive in a common sitting room with ordinary attention.

Depending on extensive sales and desiring that all who are fond of plants, should enjoy that innocent gratification, we have determined to sell at very reduced prices.

Many of the plants are now in bloom, and the public are respectfully invited to call and see them. The House will be open every afternoon. REYNOLDS & BATEHAM.
May 27.

Still More Seeds!!

WE have just received large additional supplies of genuine Orange Carrot, Mangel Wurtzel, Ruta Baga, and English Turnep seeds, of the best quality.

Also, a good supply of Cucumber, Melon, Squash, and Pumpkin seeds.

The unprecedented demand for seeds this season, had exhausted our stock of some kinds. We can now supply orders at very low prices.

REYNOLDS & BATEAAM,
Rochester Seed Store. Arcade Buildings.
May20.

Valuable Works on Gardening.

THE YOUNG GARDENER'S ASSISTANT—containing practical directions for the cultivation of Vegetables, Fruits and Flowers. By T. Bridgeman, seedman and florist, New York—seventh edition, improved. Price $1.

THE FLORIST'S GUIDE—containing practical instructions for the cultivation of Flowers. By the same author. Price 37 1-2 cents.

THE KITCHEN GARDENER'S INSTRUCTER—containing ample directions for the cultivation of culinary vegetables, herbs, &c. By the same author. Price 37 1-2 cents.

For sale by REYNOLDS & BATEHAM,
May 20. Rochester Seed Store.

Attention Farmers and Gardeners,

TO the prices of seeds now selling at the new English Store, opposite the Court-house.

Early York and Drumhead Cabbage,	1s. per ounce.
New Early Nonpareil,	3s. "
All others,	1s. 6d. "
Early Horn Carrot and the Large Field Carrot,	5s. per pound.
Field Beet or *M*angel Wurtzel,	5s. 6d. "
Radishes, of sorts, from	4s.to 5s. "
Ruta Baga,	5s. "
All other Turnip Seeds from	4s.to 5s "

The subscribers offer their stock of the above Seeds at the prices stated, with all others of their importation, equally low, they being determined to sell at such prices as shall induce growers to cultivate the Root Crops extensively, the high price of the seeds of which have in this market been hitherto considered an objection, which complaint can no longer exist, and they solicit the patronage of the public. Proof specimens may now be seen growing at their Store.

KEDIE & HOUGHTON,
apr22-tf 62 Buffalo-st. opposite the Court-House.

Rochester Seed Store—*Extra.*

OWING to their excellent facilities for procuring seed of American growth, as well as importing such as are found to mature better in other climates, the proprietors of this establishment are enabled to offer their present stock at very reduced prices, particularly *English* seeds.

Their present assortment of the growth of 1836 is very extensive, and was raised in the most careful manner by respectable seed growers in this country, or imported from the best foreign sources.

Encouraged by the liberal and increasing patronage they have hitherto received, they are determined to sell at as low prices as seeds *of equally good quality* can be purchased at any reputable seed store in the United States.

REYNOLDS & BATEHAM,
apr22 Arcade Buildings, Rochester.

Early Red Eye Beans.

A LARGE supply of these superior Beans just received at the Rochester Seed Store.

These beans are very early and productive, and from the certainty and abundance of the crop, and the high price they bring in market, are doubtless the most profitable kind for planting.

A farmer in this vicinity realized 180 dollars for the product of 2 acres the last season.

REYNOLDS & BATEHAM,
apr 22 36 Arcade Buildings.

Agents for the Rochester Seed Store.

OUR distant friends and the public will find a large assortment of Garden, Field and Flower Seeds, which may be relied on as being fresh and genuine, put up and labeled at the Rochester Seed Store, for sale at the following places;

W. & G. BRYANT, Buffalo
G. W. MERCHANT, Lockport
WILLIAMS & DORRANCE, Batavia
GATES, BRADLEY & Co. Le Roy
J. F. WYMAN, Geneseo
J. B. DUNGAN, Canandaigua
BOGARTS & WYNKOOP, Geneva
HOLDEN & VINCENT, Oswego

The above gentlemen are authorised to receive orders and payments for us, for seeds, trees, plants, or any other articles in our line. REYNOLDS & BATEHAM.
march 18

3.125 LBS. Ruta *B*aga, White Flat, Norfolk, Long Tankard, Yellow Bullock, and other Turneps, Mangel Wurtzel, French Sugar Beet, and Orange Carrot, with a great variety of *English Imported Garden Seeds* —"cheap as dirt." at the Rochester Seed Store, *Arcade Buildings.* apr29 REYNOLDS & BATEHAM.

KEDIE & HOUGHTON, Importers of English Field and Garden Seeds, beg to apprize the public that they have now for sale the largest importation of the choicest and best varieties of every kind of Garden and Field Seeds ever offered to the public in Western New-York, all of which have been selected from the most eminent growers in the Old Country, (and of the growth of 1836,) which, together with a large assortment of Seeds of American growth, they confidently submit to the public as being unequalled by any ever offered in any part of the United States, and by adhering to a strict determination of offering no other seeds but the vitality of which shall have been tested, they solicit a share of the public patronage.

K. & H. deem it necessary to state, that Mr. Kedie's intimate connection in England with most of the practical and scientific agriculturists, horticulturists and botanists, with whom he has passed all the former part of his life, gives him an advantage in his selection of seeds for the public good, not surpassed by any other establishment in the Union.

No 6 Buffalo-street, west corner store of the Eagle Block.
Catalogues to be had at the store.
The highest price paid in cash for Grass Seed.
Rochester, Feb. 7, 1837. feb 25

Morus Multicaulis.

JOSEPH DAVENPORT offers for sale 50,000 plants of the true Chinese Mulberry, or Morus multicaulis. Trees will be carefully packed and forwarded as early as desired. Orders must be sent to Colerain, Mass. till the 15th of March; after which time to Hartford, Ct. All inquiries will be attended to at his plantation, 5 miles south-west of the city. Earl orders only will be supplied, as arrangements will be made use all not called for soon.

Colerain, Jan. 23. 1837.

Mulberry and Locust Seed.

A NEW supply of White Italian Mulbery and Yellow Locust Seed, just received by

REYNOLDS & BATEHAM,
my6 *Rochester Seed Store, Arcade Buildings.*

2.000 LBS. Ruta *B*aga, English Turneps, and Mangel Wurtzel seed, just received from England, and for sale at reduced prices, at the English *S*eed *S*tore, 62 *B*uffalo st. KEDIE & HOUGHTON.
april 29

Flower Seeds.

A SPLENDID assortment of annual, biennial, and perrennial Flower Seeds of the growth of 1836, for rate at the *R*ochester Seed Store, in boxes of 20 varieties for $1, 50 varieties for $2, 100 varieties for $4, or singly at 6 cents per paper. Catalogues may be had at the Store.
april 29 REYNOLDS & BATEHAM.

WILLIAM ATKINSON, *LAND AGENT*, 17 Exchange-street, Rochester. ☞ Farms for sale.
march 4 6m

From the New York Express.

Life in the Country and the City.

The poets of old Rome sang in loud strains the praises of the country, and happy was that Roman who had his farm, his garden, or villa, around the base of Soracte, or on the shores of the beautiful Baiae. Cicero was a farmer, as well as a statesman and an orator. All the illustrious men of Rome delighted in quitting the Forum, the Campus Martius, and the walls of "the Mother of Empires," to pass the summer solstice in the cool groves, with nymphs and satyrs,—or, in the season of the harvest, to rejoice with the bacchanals, and to see them frolic in the games. Even so in England, and the Continent of Europe now. London, the mistress of modern times, as Rome was of the olden, is deserted of much of its population in summer and autumn. The possession of land is the passport to gentility in Europe. The great Metternieh boasts of his famous vineyard on the Rhine. A landed estate is the first aim of nobility in England. Titles, there come from land. Hence agriculture is the work of science and of art, and as much knowledge and art are demanded to cultivate and to lay out the park, to adorn it with trees and with fountains, as to fill the gallery, or the studio, or the niche of the palace.

How happens it then that in *our part* of our country—it is not so in the South,—that agriculture is avoided, as much as it can well be,—that the son flies off from the fields to the counter, the daghter to the city or the factory—all panting to exchange the free glorious air of Heaven for the dusty, noisy, crowded thoroughfare, say of Wall street, Pearl street or the Bowery? Whence comes the passion for cities, and of herding together? Whence that madness that makes the working man cherish the cellar or the garret, for himself and his children, when he can live better and wealthier even on the borders of the wilderness, with sky enough over his head, earth enough under his feet,—with the green grass to trample over, and the proud trees for a shade?

There is a belief in our country, it exists nowhere else,—that agriculture is a vulgar occupation, demanding no taste, nor genius, and nothing but the turning of the sod, and the levelling of the tress. How false is this. Why, the Vatican, in its way, is not more beautiful,—with the choice works of ancient and modern art in it,—a Belvidere Apollo here, and a Raphael fresco there,—than an English park in *its* way,—where a landscape is *worked out* as a picture has been,—a tree shaped to fit this view, and a hedge designed to aid that,—now perhaps a fonntain, or a waterfall, anon a herd of deer,—it may be a hill created by industry, or a little river, with the gods and goddesses presiding over, fitted to run in the line that beauty is demanding,—and all harmonizing with Nature, as taste and genius and science have aided in adorning it. Even the cottage of the laboring Englishman—with his front door so neat—the roses, and ivy and woodbine creeping over and adorning it, and the well-trimmed hedge in its front, is a jewel upon the face of the earth, and taste has made it so, for Nature has done but little for our father-land. The idea then is preposterous, that the highest effort cannot as well be expended in adorning the surface of the earth, as in chiselling out the rough block of marble, or in putting colors on the canvas to speak. All art is but subsidary to agriculture. The Vatican, and the galleries of the Roman capital, and of Naples and Florence, have been made up from the Roman vilias,—from the ruins of the Tevoli of Adrian—the Tusculum of Cicero, or the gardens of Sallust.

We know not why it is, but so it is, there is in the five States a most unconquerable aversion to agriculture, and the consequence is, with New England in particular, that a farming people are fed from abroad, by the agriculture of other States, or of foreign nations. The multitude seem more to love the throng—the city,—the tinkling of money in the shop of the broker, or the rustle of silk and calico in the shop of the dealer, than the notes of the sweet songster of the woods, the rich beauty of the trees, or the inviting verdure of spring and summer. One reason is, that we have no farmers, such as the farmers of England, of Holland, or of Lombardy, who embellish Nature, and make their homes more delightful than the loftiest palaces of the town. Our men of wealth in the country, who have sons to educate, prefer to manufacture them into third-rate lawyers, fourth-rate parsons, and sixth-rate doctors, rather than to bring them up in the way that should teach them to raise a double crop from the same acre of land, or to introduce some new product, which should double the available means they now have.

As a farming people, the means of creating wealth from landed estates are not yet half developed.—There is no reason on earth why this should not be a vine growing country, and yet it is not! There is no reason why the Old World should find us in silks, and yet it does. So varied is our soil, our climate, and so extended our lines of latitude, from the rocky and frozen regions of the river St. John, to the sandy Sabine, that we have all the capacities for doing every thing for ourselves; and yet at this moment, we are oppressed, and over-burthened with a prodigious foreign debt. The cotton planters make money. Why may not the hemp growers? The sugar planters make money; and why may not stock growers of even the Green Mountains? *Science* is what is wanted first and then art and taste will come as handmaids. Educate then your boys in college, if you choose—a good education hurts no man—but make Farmers of them afterwards, if you wish them to be happy and healthy.

Wall Street is a big sounding place in the history of our time now. We live there some twenty hours in a day, and therefore know something about it. When the Wall street Banks suspend specie payment, the whole Union follows the example.—When the Wall street Banks expand, the hearts of the people are made glad. Wall street is the money throne of the United States of America. Its bankers are the money princes of the day. States of the Union have their destinies settled there—and Wall street tells them whether they shall have railroads or not, canals or not, money or not; for the Rothchilds of Wall street make and unmake empires here at will. But Wall street, the Thread Needle street of the New World, is a vile place at best.—The street is so dusty, and dirty, so filled up with old bricks, and stones, that respiration even is difficult in it; and a lusty old tree, which has long felt that it was not at home in such a street as this, is sickening and dying away daily in this busy thoroughfare of man. When the clerks within it go home, many of them lie down in boarding houses in rooms no bigger than the coffins of the ancients, and when the money makers of the day reach their families, they are harrassed and agitated by excitement, trembling lest a packet ship should bring them the news of the shipwreck of their fortunes, or some convulsion blast all their hopes. Now in what is this Wall street to be compared with some beautiful river or lake of the country. Not twenty of these men of wealth have a garden as large as the pea-patch of the Farmer. Not one of them who, on a warm summer day, does not envy the Farmer, who has his green grass, his garden, his trees to look at and above all his pure air to breathe, and his pure water to drink.

The true art of living is the Roman life, or the life of the English of the present day,—the mingling of the country and the town,—the country for summer, and the city for winter,—with its books, its libraries, its excitement, and the collision of mind with mind. Say not the farmer cannot afford a residence in the city in the winter, for with economy he can. He needs no big palace for himself & his family there; let him live as the French do in Paris,—in some one story of some large house, with a kitchen & all its appurtenances—& not in a whole princely habitation. Economy, a judicious expenditure of money—prudnce and skill will make a little go far. That wealth is the great object of life particularly in a country where "wealth is" no "sign of merit," is one of the most delusive and ruinous ideas of the day. All of *matter* that we can gather together, it has been well said, will but give us our bread and clothes,—but there is a double means of living upon the resources of a man's own mind, upon taste, upon science and the arts,—when books answer for companions, and when with them, a man can throw himself into every country and every circle of the habitable globe,—now in the saloons of the European prince, now with the Arab in the desert, and anon with the Indian in his wilderness,—reading instruction in every spear of grass he walks over,—every, tstone his foot-fall strikes,—in every star above him and the whole atmosphere, in and around him. To live, and *how* to live, and *what* is living are topics we should like to discuss, if we can ever find room and time.

The Mount Vernon Farmer.

The fame of Gen. Washington as a soldier and statesman is universally known and highly admired by all who appreciate talents, worth, and love of country; but his character as a farmer was less known in his day, and his memory in this respect is not venerated according to its desert. Possessing ample means and the most ardent love of rural life, he was one of the first experimental and practical farmers in Virginia. His estate at Mt. Vernon consisted of 10,000 acres of land in one body, equal to about 15 square miles. It was divided into farms of convenient size, at the distance of 2, 3, 4 and 5 miles, from his mansion house. These farms he visited every day in pleasant weather, and was constantly engaged in making experiments for the improvement of agriculture.

Some idea of the extent of his farming operations may be formed from the following facts,—in 1787 he had 500 acres in grass—sowed 600 bushels of oats—700 acres with wheat, and prepared as much more for corn, barley, potatoes, beans, peas, &c., and 150 with turneps. His stock consisted of 140 horses, 112 cows, 235 working oxen, heifers and steers, and 500 sheep. He constantly employed 250 hands, and kept 24 ploughs going during the whole year, when the earth and the state of the weather would permit. In 1786, he slaughtered 150 hogs, weighing 18,560, for the use of his family, besides provisions for his negroes.—*Silk Culturist.*

Quality of American Silk.

During a late interview with a very intelligent Riband weaver, from Coventry, England, we showed him a specimen of American raw silk, reeled by an inexperienced reeler, and he pronounced it, in respect to strength, altogether superior to any European or India silk he had ever woven in his native country. He remarked that he had never seen silk of equal strength of fibre, and had no doubt that he could weave from it double the quantity of ribands that he could from the silk ordinarily used by the riband manufacturers of Coventry. This speaks volumes in favor of the quality of American silk, especially such as is growed in the northern latitudes. The eccoons, from which the silk was reeled, were made on the cold mountains of Lichfield county, Conn.—*Ib.*

Mineral Tallow.

A mineral substance, possessing most of the properties of tallow, has been found in a bog on the borders of Loch Tyns, in Scotland. About a century since this singular mineral was discovered, for the first time, on the coast of Finland, and afterwards at Strasbourg. It is said to be as combustible as any of the inflammable oils, and in color, feel, taste, and all other respects except smell, to resemble animal tallow.—*Ib.*

Fruit Trees For Sale.

THE subscriber respectfully informs his friends and the public that he has for sale at his Nursery in Rochester, Monroe county, state of New York, a large quantity of Fruit Trees, grafted and innoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms. SAMUEL MOULSON.

apr 15-tf

Monroe Horticultural Garden & Nur

SERIES, GREECE, MONROE CO., N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired delivered on the canal one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant gratis, or may be had by calling at the office of the Genesee Farmer.

April 1, 1837. ASA ROWE.